



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,270	03/22/2004	Douglas C. Sundet	54826US010	1947
32692	7590	05/22/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			PHAM, MINH CHAU THI	
PO BOX 33427			ART UNIT	PAPER NUMBER
ST. PAUL, MN 55133-3427			1724	

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/806,270	Applicant(s) SUNDET ET AL.	
	Examiner Minh-Chau T. Pham	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/25/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai et al (6,428,610 B1).

Tsai et al teach a method of making a self-supporting pleated air filter comprising the steps of forming a plurality of pleats in the filter media (col. 4, lines 4-6), bonding at least one planar first reinforcing strip (16) on the front face of a filter media (10, 12, 14, col. 3, lines 30-57), positioning at least one reinforcing member (22) on the rear face of filter media (10, 12, 14), cutting the pleated filter media to size (col. 4, lines 6-7). Tsai et al further teach the step of forming a plurality of pleats in the reinforcing member during the step of forming the pleats in the filter media (Figs. 7, 8a & 8b, col. 3, line 30 through col. 4, line 14). Tsai et al also teach a self-supporting pleated filter comprising a first reinforcing member (16) oriented on the front face of a filter media (10, 12, 14, see Fig. 5a), and a second reinforcing member (22) oriented on the rear face of a filter media (10, 12, 14, see Fig. 2) and the filter media is pleated (see Figs. 7, 8a & 8b).

Regarding to the numerical requirements of claims 6, 18-22 and 34-37, the specification contains no disclosure of either the critical nature of these requirements or any unexpected results arising therefrom, and as such these requirements would be

arbitrary and therefore obvious. Applicant **must** show that these requirements are critical. *In re Woodruff, 16 USPQ 2d 1934.*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiyotani et al (6,682,576 B1).

Kiyotani et al teach a method of making a self-supporting pleated air filter comprising the steps of forming a plurality of pleats in the filter media (col. 6, lines 40-44), bonding at least one planar first reinforcing strip on the front face of a filter media (col. 5, lines 45-60), and positioning at least one reinforcing member on the rear face of filter media (col. 7, lines 40-57) (see Fig. 5). Kiyotani et al further teach the step of applying frame member to the pleated filter media (col. 4, lines 35-41 and lines 58-62, col. 6, lines 45-52). Kiyotani et al also teach a self-supporting pleated filter (43) comprising a first reinforcing member (51a) oriented on the front face of a filter media (51), and a second reinforcing member (51b) oriented on the rear face of a filter media (51) and the filter media is pleated (see Fig. 2).

Regarding to the numerical requirements of claims 6, 18-22 and 34-37, the specification contains no disclosure of either the critical nature of these requirements or

any unexpected results arising therefrom, and as such these requirements would be arbitrary and therefore obvious. Applicant must show that these requirements are critical. In re Woodruff, 16 USPQ 2d 1934.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
Art Unit : 1724
May 18, 2006